

Purchasing Receipts

PO No	Supplier	Line Item No	Rel No	Terms	Purchased Item	Description	For Part No	Project	Equipment ID	Order Qty	Due Date	Received Quantity	Accounting Job No	Container No	Status	Receive Date	Price/Unit	Aging Days	Past Due	Total	Supplier Name
P0040612	MEC002-VU	11	1	Net 30	M303B1.500X4.000	303 Bar 1.500" X 4.000" MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE				6	6/8/24/2018	6		S101797	Stock	8/13/2018	\$ 238.50 / ft	0		\$1,431.00	Metaux Castle
		15			M2024T3S.063	2024-T3 .063 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A- 250/4 OR AMS-QQ-A- 250/4 OR AMS 4037 OR ASTM B209 receive sf				96		96		S101798	Stock	8/13/2018	\$ 6.51 / sf	0		\$624.96	Metaux Castle
		16			M2024T3S.080	2024-T3 .080 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A- 250/4 OR AMS-QQ-A- 250/4 OR AMS 4037 OR ASTM B209 receive sf						96		S101799	Stock	8/13/2018	\$ 6.86 / sf	0		\$658.56	Metaux Castle
Total:												198								\$2,714.52	

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Castle Metals®

A. M. Castle & Co.

PACKING SLIP/
CERTIFICATE OF CONFORMANCE

Page 1 of 2


Shipment No:3671722

Ship From: A. M. CASTLE & CO. 2150 ARGENTIA ROAD MISSISSAUGA, ON L5N 2K7 CAN		Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA		Ship To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN		Deliver To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	
Date Shipped	F.O.B.	Freight Terms		Carrier	BOL No		
10-AUG-18	ORIGIN	Prepaid		MANITOULIN	3671722-2		

Shipment Details		Final Destination Branch - TOR
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Order No 5215329	Line No 1	Item No BF1238010.MO	Description 1.5000.4.0000.FLAT.303.STAINLESS.CD.ANN 72"LONG CUT TO 72 IN () SPECIFICATIONS: ASTM A582 ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #S Email P/s and certs to: clavoie@dartaero.com	
Purchase Order No 40612	Part Number		Ordered Qty 1.00 PCS	Invoice Qty 6.0000 FT

Details ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #S Email P/s and certs to: clavoie@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS				
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Delivery No. 122038102	Mill/Source	Heat Number  G 2 3 8 6 9 A1	Mech Id	PCS 1	Width (IN)	Length (IN)	Shipped Qty(LBS) 122.5019
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We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned.

Date Printed: 10-AUG-2018 03:08:25 PM

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Castle Metals®

A. M. Castle & Co.

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Page 2 of 2

for credit.				
Reviewed by Authorized Castle Metals Representative:			Date:	Name:

AUG 10 2018



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A. M. Castle & Co.


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Page 1 of 1

Shipment No:3671710

Ship From: A. M. CASTLE & CO. 2150 ARGENTIA ROAD MISSISSAUGA, ON L5N 2K7 CAN		Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	Ship To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN	Deliver To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA
Date Shipped 10-AUG-18	F.O.B. ORIGIN	Freight Terms Prepaid	Carrier MANITOULIN	BOL No 3671710-2

Shipment Details	Final Destination Branch - TOR
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Order No 5214517	Line No 3	Item No 770896.MO	Description 0.0630.SH.2024.T3.ALUMINUM.BARE.48.0000.144.0000 - PROTECTIVE VINYL COATING SPECIFICATIONS: AMS-QQ-A-250/4
Purchase Order No 40612	Part Number	Ordered Qty 2.00 PCS	Invoice Qty 2.00 PCS
Details ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #S Email P/s and certs to: clavoie@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS			
Delivery No. 122002040	Mill/Source ARCONIC INC	Heat Number  497313	Mech Id 2
		Width (IN)	Length (IN)
			Shipped Qty(LBS) 88.4956

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the intended use. No specific test results are included as part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing within 60 days of receipt of material. The size, or material condition, or material cannot be returned.

Reviewed by Authorized Castle Metals Representative:  Date: Name:

**Castle Metals®**

A. M. Castle & Co.

PACKING SLIP/
CERTIFICATE OF CONFORMANCE

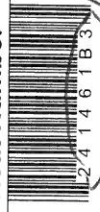
Page 1 of 1

Shipment No:3671710

Ship From: A. M. CASTLE & CO. 2150 ARGENTIA ROAD MISSISSAUGA, ON L5N 2K7 CAN		Sold To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA	Ship To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CAN	Deliver To: DART AEROSPACE LTD 1270 ABERDEEN HAWKESBURY, ON K6A 1K7 CA
Date Shipped 10-AUG-18	F.O.B. ORIGIN	Freight Terms Prepaid	Carrier MANITOULIN	BOL No 3671710-2

Shipment Details

Final Destination Branch - TOR

Order No 5214517	Line No 4	Item No 770940.MO	Description 0.0800.SH.2024.T3.ALUMINUM.BARE.48.0000.144.0000 - PROTECTIVE VINYL COATING SPECIFICATIONS: AMS-QQ-A-250/4		
Purchase Order No 40612	Part Number	Ordered Qty 2.00 PCS	Invoice Qty 2.00 PCS		
Details ALL PAPERWORK MUST FOLLOW ORDER / CUSTOMER MUST RECEIVE AT TIME OF DELIVERY ALL MATERIAL MUST HAVE IDENTIFYING MARKINGS EX:HEAT #'S Email P/s and certs to: clavoie@dartaero.com END USER: DART AEROSPACE END USE: COMMERCIAL AIRCRAFT PARTS					
Delivery No. 122002040	Mill/Source KAISER ALUMINUM	Heat Number  2411461B3	Mech Id	PCS 2	Width (IN)
				Length (IN)	Shipped Qty(LBS) 111.7318

We hereby certify the material covered by this certification conforms in accordance with the above specifications and has been found to meet the applicable requirements for the material, including any specifications forming a part of the description. Test reports are on file subject to examination. All claims for defective material are waived unless made in writing to A.M. Castle & Co. within 60 days of the shipment. Material cut to the correct size, or material cut by the customer cannot be returned for credit.

Reviewed by Authorized Castle Metals Representative:

AUG 10 2018

Date:

SUE KALOUS



Date Printed: 10-AUG-2018 03:01:45 PM



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO040612

Supplier: MEC002-VU
Metaux Castle
P.O. Box 4090 Stn A
Toronto
ON
M5W OE9 Canada

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO040612
PO Date: 7/26/18
Due Date: 8/22/18
**Purchase Order
Revision:**
Revision Date:
Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Via: Ground
Pymt Terms: Net 30
Freight Terms:
Special Comments:

Revised

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1		M7075T6S6.000X0.250		7075-T6S Sheet 6" Thick Plate X 0.25" Wide : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209 receive ft	Firmed	-	8/22/18	80 ft	0 ft	80 ft	\$14.35/ft	\$1,148.00
2		M7075T6S6.000X1.000		7075-T6S Sheet 6" Thick Plate X 1" Wide : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209 receive ft	Firmed	-	8/22/18	60 ft	0 ft	60 ft	\$43.42/ft	\$2,605.20
3		M7075T6S1.500X1.500		7075-T6S Sheet 1.5" Thick Plate X 1.5" Wide : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209 receive ft	Firmed	-	8/22/18	80 ft	0 ft	80 ft	\$20.50/ft	\$1,640.00
4		M7075T6S1.750X2.250		7075-T6 Sheet 1.750" X 2.250" : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209 receive ft	Firmed	-	8/22/18	43.75 ft	0 ft	44 ft	\$40.86/ft	\$1,787.63
Line Item Note 20 pc - 48.25" long												
5		M7075T6S1.250X2.750		M7075T6S1.250" X2.750" Cut From Plate : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM	Firmed	-	8/22/18	12 ft	0 ft	12 ft	\$31.20/ft	\$374.40



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO040612**

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
				B209 receive ft								
6		M7075T6S0.375X3.000		7075 T6 Sheet 0.375" X 3.000" : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209	Firmed	-	8/22/18	60 ft	0 ft	60 ft	\$11.86/ft	\$711.60
7		M7075T6S0.750X4.000		7075 T6 Sheet 0.750" X 4.000" : MATERIAL: 7075-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/12 OR AMS-QQ-A-250/12 OR AMS 4045 OR ASTM B209	Firmed	-	8/22/18	40 ft	0 ft	40 ft	\$28.58/ft	\$1,143.20
8		M7075T6S1.000X1.250		7075 T6 Sheet 1.000X1.250 : MATERIAL: 7075-T6 OR T651/T6510/T6511/T62 ALUMINUM BAR AS PER AMS-QQ-A-225/9 OR AMS 4122/4123/4186/4187 OR PER AMS-QQ-A-200/11 receive ft	Firmed	-	8/22/18	12 ft	0 ft	12 ft	\$17.15/ft	\$205.80
9		M7075T73B1.250X02.000		7075-T73 Bar 1.250" X 2.000" Cut In Billet 30" Long : MATERIAL: 7075-T73 OR 7075-T7351/T73510/T73511 BAR PER AMS-QQ-A-200/11 OR AMS-QQ-A-225/9 OR AMS 4124 OR AMS-QQ-A-250/12 OR AMS 4078 receive ft	Firmed	-	8/22/18	25 ft	0 ft	25 ft	\$26.10/ft	\$652.50
Line Item Note 10 pcs cut at 30" long												
10		M7075T73R1.000		7075-T73 Round Bar 1.00 : MATERIAL: 7075-T73 OR 7075-T7351/T73510/T73511 ROUND BAR AS PER AMS-QQ-A-200/11 OR AMS-QQ-A-225/9 receive ft	Firmed	-	8/13/18	12 ft	0 ft	12 ft	\$11.47/ft	\$137.64
11		M303B1.500X4.000		303 Bar 1.500" X 4.000" : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT ACCEPTABLE	Firmed	-	8/22/18	6 ft	0 ft	6 ft	\$238.50/ft	\$1,431.00
12		M303B1.000X1.000		M303B1.000 X 1.000 : MATERIAL: AISI 303 SS BAR AS PER ASTM A582 NOTE: AISI 304/316 NOT	Firmed	-	8/13/18	12 ft	0 ft	12 ft	\$18.72/ft	\$224.64



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO040612

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
				ACCEPTABLE receive ft								
13		M2024T3S.090		2024-T3 .090 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 receive sf	Firmed	-	8/22/18	144 sf	0 sf	144 sf	\$8.16/sf	\$1,175.04
14 DAS 61 9-89		M4130NR0.375		4130 Steel Round Bar .375" : MATERIAL: AISI 4130N ROUND BAR AS PER MIL-S-6758 OR AMS 6348/6370/6528 receive ft	Firmed	-	8/13/18	60 ft	0 ft	60 ft	\$2.37/ft	\$142.20
												AUG 09 2018
15 DAS 61 9-89		M2024T3S.063		2024-T3 .063 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 receive sf	Firmed	-	8/22/18	96 sf	0 sf	96 sf	\$6.51/sf	\$624.96
												AUG 13 2018
16 DAS 61 9-89		M2024T3S.080		2024-T3 .080 Sheet : MATERIAL: 2024-T3 ALUMINUM SHEET AS PER QQ-A-250/4 OR AMS-QQ-A-250/4 OR AMS 4037 OR ASTM B209 receive sf	Firmed	-	8/22/18	96 sf	0 sf	96 sf	\$6.86/sf	\$658.56
												AUG 13 2018
17 AR		M304R1.250		304 Round Bar 1.250 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	8/3/18	12 ft	0 ft	12 ft	\$10.42/ft	\$125.04
												18/08/07
18 DAS 61 9-89		M304R1.500		304 Round Bar 1.500 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	-	8/3/18	12 ft	0 ft	12 ft	\$13.81/ft	\$165.72
												AUG 09 2018
19		M6061T6B2.000X08.000		6061-T6 Bar 2.00" X 8.00" (Cut In 4Ft Section) : MATERIAL: 6061- T6/T651/T6510/T6511/T62 ALUMINUM BAR PER QQ-A-225/8 OR AMS-QQ- A-225/8 OR AMS 4117/4128/4115/4116 OR QQ-A-200/8 OR AMS-QQ- A-200/8 OR AMS 4160 OR ASTM B211 OR ASTM B221 receive ft	Firmed	-	8/14/18	8 ft	0 ft	8 ft	\$56.83/ft	\$454.64
Line Item Note: cut in section of 4 ft												
20 DAS 61 9-89		M303R1.250		303 Round Bar 1.250 : MATERIAL: AISI 303 SS	Firmed	-	8/3/18	12 ft	0 ft	12 ft	\$11.80/ft	\$141.60
												AUG 09 2018



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER PO040612

Items												
Line Item	Job	Part	Supplier Part No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
				ROUND BAR AS PER ASTM A582 NOTE:304/316 NOT ACCEPTABLE receive ft								
Grand Total:												\$15,549.37

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)
A026 certification of material conformance
A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program
A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 8/3/18 11:09 AM dart.baker.diane

JB



UNIVERSAL
STAINLESS
Dunkirk Specialty Steel, LLC.
830 Brigham Road | Dunkirk, NY 14048
(716) 366-1000
Material Certification



#150690968 3/12

MILL ORDER: 0080835
PART NUMBER: SH29410
P.O. NUMBER: 49198-7
SERIAL NUMBER: DNK-0080835-G23869-02028

PAGE NUMBER: 1 of 1

P.O. DATE: 9/16/2017
PRINTED: 2/19/18 10:24

S FRY STEEL COMPANY
O T P.O. BOX 4048
L O
D

SANTA FE SPRINGS, CA 90670

S FRY STEEL CO
H T C/O C.M.I. FREIGHT TRANS
I O 3751 CEDAR CREEK DRIVE
P

JOLIET, IL 60436

Material Description: STAINLESS STEEL FLAT BAR 303 EAF+AOD HOT ROLLED ANNEALED PICKLED ASTM A494-16, ASTM A320-17a (B8F/303 Class 1), MIL-S-7720 Am. 1 (303S condition A), Federal QQ-S-764B Am. 2 (303 condition A) ASTM A582-12e1 (303 condition A), Federal QQ-S-763C Am. 2 (303 condition A), AMS 5640V Type 1 (ex. finish),

Size: 1.5000 X 4.0000 X 132.0000 MIN/ 156.0000 MAX RANDOM LENGTH

Heat Number	C	0.060	MN	1.80	SI	0.34	S	0.21	P	0.022
G23869	CR	17.80	W	<0.05	V	0.06	NI	8.18	MO	0.23
	CO	0.07	CU	0.29	SN	0.005	PB		CB	0.03
	TA		AL	<0.01	TI	<0.01	FE		B	
	O		MG		CA		SE		ZR	
	AG		BI		N	0.038	H		CQ	

TENSILE: DIR. T/S KSI 0.2% Y/S KSI %EL %RA
LONG. 93.8 36.2 67.94 70.44

HARDNESS: 150 HBW

MACRO ETCH: as-received - TEST WAS PERFORMED BY UNIVERSAL STAINLESS, BRIDGEVILLE, PA
S - 1 R - 1 C - 1

MICROSTRUCTURE: ACCEPTABLE - NO DITCHING FOUND

THIS MATERIAL WAS SOLUTION ANNEALED AT A TEMPERATURE OF 1900°F (+/-25) FOR 1 HOUR FOLLOWED BY WATER QUENCH



FRY STEEL CO. CERTIFIES THAT THIS IS
A TRUE COPY OF THE ORIGINAL MILL TEST
REPORT NOW ON FILE
RECEIVED AND INSPECTED

FEB 20 2018

BY
CHIP BANDOVAL - O.B. MANAGER

Date: 02/19/18

/S/ Amy Giordano

/S/ Kevin Seidel

Kevin Seidel, Technical Mgr.

Prepared by: Amy Giordano

Melted and manufactured in compliance with DFARS 252.225-7009 ALT 1. Melted and chemistry tested by USAP in Bridgeville, PA., USA. Material Manufactured in USA. Certification IAW DIN 50 049/EN 10204 3.1. Material complies with EU directive 2002/95/EC (RoHS). The test results shown are certified to be a correct statement of records that were derived from testing samples of the material. Results meet applicable specifications. No welding was performed on the material supplied on this order. Material is free from mercury contamination. Material has not been cleaned prior to heat treatment. Material is of NAFTA origin. This material was produced under the Dunkirk Specialty Steel Quality Management System documented in QM, Rev 13 Dated 12/19/2017, conforming to NCA-3800. Material testing was performed as applicable (latest revision) in accordance with ASTM A370, A604, E8, E10, E18, E23, E45, E112, E139, E381, E572, E1019, E1444, & AMS 2315. The recording of false, fictitious, or fraudulent statements on this document may be punished as a felony under federal statutes, including Federal Law, Title 18, Chapter 47. Test results are maintained in company records. This certification shall not be produced, except in full, without written approval of Dunkirk Specialty Steel. Material is free from Radioactive Contamination. Safety Data Sheets (SDS) are available at www.univstainless.com. If applicable: Decarb test - furnace atmosphere is Argon; Corrosion Test (ASTM A262 Practice A) - Etchant used -10% Oxalic Acid; Microstructure @ magnification 250 - 500X. Unless otherwise stated, Percentage Elongation is measured in 4D. Speed of Testing: 0.005 in/in/min.; 0.05 in/in/min. Universal Stainless has complied with all producer requirements of AS6279 as applicable.

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: AISI 303 SS BAR
(NOTE - AISI 304/316 NOT ACCEPTABLE)

SPECIFICATION:

ASTM A582

PART NUMBER:

M303B | TTT | X | WWW | WWW |
THICK | WIDTH

WHERE "T TTT" = THICKNESS IN INCHES
AND "WWW WWW" = WIDTH IN INCHES

EG. 0.5" x 3.0" BAR = M303B0.500X03.000

RELEASED
R 2010-02-02
NRP

B	REFORMAT DWG. ADD SPECS (ZN D8-1), REF PAR 08-020A	CP	10 01 05
A	NEW ISSUE	DS	02 05 29
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	10 01 05		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M303B			
REV. B			
SHEET 1 OF 1			
TITLE 303 BAR			
SCALE NTS			
DATE 10 01 05			
COPYRIGHT © 2002 BY DART AEROSPACE LTD			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M 303BL500x4-000
 DATE: 10/08/13

PO / BATCH NO.: P00406125101797

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 64+
 QUANTITY INSPECTED: 64+
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 1.500"
 THICKNESS RECEIVED: 1.500"
 SHEET SIZE ORDERED: —
 SHEET SIZE RECEIVED: —

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORROSION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	ASTM A 582
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
PHOTO REQUIRED	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	HT: 623869
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N <input type="checkbox"/>	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input type="checkbox"/> N <input checked="" type="checkbox"/>	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u>	SIGNED OFF BY: _____
DATE: <u>10/08/13</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

CERTIFIED INSPECTION REPORT

Arconic

DAVENPORT WORKS 4879 State Street Bettendorf, IA 52722

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

This test report shall not be reproduced except in full, without the written approval of the Quality Department. No alteration, addition or other change is authorized to be made to this certificate. The recording of false, fictitious, or otherwise fraudulent statements or entries on this certificate by any recipient may be punished as a felony under applicable law.

S. N. Srinivasan

Nandu Srinivasan
Manufacturing Director - Davenport & Satellites

Terence Thom

Quality Assurance Manager

Page 1 of 2

Ship To: A M CASTLE & COMPANY DIP.
14001 ORANGE AVE
PARAMOUNT 90723 CA

Item Description
0.063 IN TK (+.0030 -.0030) X 48.0 IN W (+.046875 -.046875) CAT X 772196 (N) A/T 2024-T3 COILED SHEET MILL FINISH 772196. A92024-155 REV 2 AMS-QQ-A-250/4 REV B AMS4037 REV Q ASTM B209 REV 14 ((NOT MARKED)) LIGHTLY OILED COIL SIZES: ID 20 IN COIL WGT: MAX 5625 LB
MAX GROSS SKID WGT: 6000 LB
QUAN TOL
CUST REQ 18-04-
04 *** W/E 18-04-14 ***

Num	Package	Ticket	Lot	Weight	Quantity	UOM	Inspector	Clock Numbers
1	484501		497313	2731	1	PC	27747	47428
2	484506		497313	5603	1	PC	27747	47428
				8334	2			

Notes for CQR: 0259630.1

PRODUCT PRODUCED AND MARKED TO THE REQUIREMENTS OF AMS-QQ-A-250/4 ALSO MEETS THE REQUIREMENTS OF QQ-A-250/4E, AMENDM ENT 2.
PRODUCT PRODUCED AND MARKED TO THE REQUIREMENTS OF QQ-A-250/4E AMENDMENT 2 ALSO MEETS THE REQUIREMENTS OF AMS -QQ-A-250/4.

CQR: 0259630.1 -Specification Limits

Temp	Dir	Long	Transv.	Max	Min	UTS	TYS	BL4D
						KSI	KSI	PCT
				63.0	42.0			15

Chemical Composition	SI	FE	CU	MN	MG	CR	ZN	TI	Other
		0.50	0.50	4.9	0.9	1.8	0.10	0.25	Aluminum
Alloy 2024									Each
									Total
									Aluminum
									REMAIN



CERTIFIED INSPECTION REPORT

Arconic

DAVENPORT WORKS 4879 State Street Bettendorf, IA 52722

Ship From: RIVERDALE, IA.

We hereby certify that the material covered by this certificate has been inspected with, and has been found to meet the applicable requirements described therein, including any specifications forming a part of the description and that samples representative of the material met the composition limits and had the mechanical properties shown on the face of this sheet.

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S. N. Srinivasan
Nandu Srinivasan
Manufacturing Director - Davenport & Satellites

Terrence Thom
Quality Assurance Manager

3527868
Ship Date 2018-06-15
B.I. No. 11774733
Invoice No. 00000
Arconic No. 1000975554-1
Item DP-75554-01-1
P.O. No./Govt Contract No. Customer Arconic Item
452888 Ln#: 1 A M CASTLE & COMPA G041174021R01

Page 2 of 2

QCR: 0259630.1 - Specification Limits (cont.) -----
Lot: 497313 - Mechanical, Physical, Metallurgy, Quantometer Results -----

Temp	Dir	Long	Transv.	No->	Test	2	UTS	KSI	TYS	EL4D	PCT
							65.8	44.9	44.9	20.7	
							65.7	44.7	44.7	18.8	

Cast Number	Chemical	OES	SI	FE	CU	MN	MG	CR	ZN	TI	Other	Each	Other	Total
H8394013	Actuals		0.06	0.17	4.5	0.64	1.5	0.00	0.04	0.02	< 0.05	< 0.15		

This material was melted in the United States or a Qualifying Country [REF DFARS 225.872.1(a)]; it was manufactured in the United States

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL: 2024-T3 ALUMINUM SHEET

SPECIFICATION:

Q0-A-250/4 OR AMS-Q0-A-250/4
OR AMS 4037
OR ASTM B209

PART NUMBER:

M2024T3S | XXX | THK

WHERE "XXX" = SHEET THICKNESS (IN INCHES)

EG. 0.063" THICK SHEET = M2024T3S.063

PREFERRED SIZE:

.XXX BY 4FT BY 10FT

RELEASED
R 2009-03-23

B	REFORMAT DWG. ADD ASTM B209 SPEC (Zn D8-1), PAR 09-02-08A	CP	09.07.07
A	NEW ISSUE	DS	01.09.24
REV	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR			
DATE	09.07.07		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA			
DRAWING NO. M2024T3S			
TITLE 2024-T3 SHEET SPEC			
REV. B SHEET 1 OF 1			
SCALE NTS			
DATE 09.07.07			
COPYRIGHT © 2009 BY DART AEROSPACE LTD ALL RIGHTS RESERVED. NO REPRODUCTION OR TRANSMISSION IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM DART AEROSPACE LTD.			

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M2024735.063
 DATE: 18/08/13

PO / BATCH NO.: P0040612 / 5101797

MATERIAL CERT REC'D: Yes
 QUANTITY RECEIVED: 96sf
 QUANTITY INSPECTED: 96sf
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.080"
 THICKNESS RECEIVED: 0.080"
 SHEET SIZE ORDERED: 4'x12'
 SHEET SIZE RECEIVED: 4'x12'

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y <input checked="" type="checkbox"/> N	
CORRECT FINISH	Y <input checked="" type="checkbox"/> N	
CORROSION	Y <input checked="" type="checkbox"/> N	
CORRECT GRAIN DIRECTION	Y <input checked="" type="checkbox"/> N	
CORRECT MATERIAL PER M-DRAWING	Y <input checked="" type="checkbox"/> N	AMS-QQ-A-250/4
CORRECT THICKNESS	Y <input checked="" type="checkbox"/> N	
PHOTO REQUIRED	Y <input checked="" type="checkbox"/> N	
CORRECT REF # TO LINK CERT	Y <input checked="" type="checkbox"/> N	HT: 497313
CORRECT MATERIAL IDENTIFICATION	Y <input checked="" type="checkbox"/> N	
CORRECT M# ON THE MATERIAL	Y <input checked="" type="checkbox"/> N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y <input checked="" type="checkbox"/> N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y <input checked="" type="checkbox"/> N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AT</u> DATE: <u>18/08/13</u>	SIGNED OFF BY: _____ DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SHIP TO:

A M CASTLE & CO
14001 ORANGE AVE
P.O. BOX 1402
PARAMOUNT, CA 90723

SOLD TO:

AM CASTLE & CO- SOLD TO
1420 KENSINGTON RD
SUITE 220
OAK BROOK, IL 60523

KAISER ALUMINUM

Trentwood Works

PO Box 15108, Spokane Valley WA 99215-5108

15000 E Euclid, Spokane Valley WA 99216

Phone: (800) 367-2586

CERTIFIED TEST REPORT

Serial Number

4505702

CUSTOMER PO NUMBER: 453537-1	WORK PACKAGE:	CUSTOMER PART NUMBER: 770940	SHIP RUN/LOAD: 104245/29	GOV'T CONTRACT NUMBER:
KAISER ORDER NO: 1251254-1	SHIP DATE: 12-APR-2018	ALLOY: 2024	CLAD: BARE	TEMPER: T3
WEIGHT SHIPPED: 3728 LB	QUANTITY: 67 PCS EST.	TRUCK B/L #: 2073063	GAUGE: 0.0800 IN (2.0320 MM)	PRODUCT DESCRIPTION: Kaiser Stretched
			DIAMETER/WIDTH: 48.000 IN (1219.2 MM)	LENGTH: 144.000 IN (3657.6 MM)

MHU 2192612: LOT 254063B1: 13 pieces;

MHU 2200148: LOT 241461B3: 54 pieces;

Certified Specifications

AMS 4037/RevQ
CMMP 019/RevD

AMS-QQ-A-250/4/RevB
CMMP 025/RevV

ASTM B 209/Rev14

Test Code: 1504

Lot: 241461B3

Cast 615

Drop 07

Test Results

Ingot 3

Melted in USA

(ASTM E8/B557)

(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T3	LT / 2 (Min:Max)	65.6 : 66.0 (452 : 455)	45.1 : 45.8 (311 : 316)	16.9 : 17.8

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual(wt%)	0.07	0.20	4.6	0.53	1.4	0.01	0.11	0.02	0.01	0.00	TOT 0.02
Lot: 254063B1	Cast 597		Drop 57		Ingot 3						Melted in USA

(ASTM E8/B557)

(EN 2002-1)

Tensile:	Temper	Dir / # Tests	Ultimate KSI (MPA)	Yield KSI (MPA)	Elongation %
	T3	LT / 2 (Min:Max)	66.0 : 66.6 (455 : 459)	45.5 : 45.6 (314 : 314)	18.1 : 18.4

(ASTM E1251)

Chemistry:	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER
Actual(wt%)	0.07	0.18	4.5	0.53	1.3	0.01	0.13	0.02	0.01	0.00	TOT 0.03





CERTIFIED TEST REPORT

Serial Number
4505702

Trentwood Works
PO Box 15108, Spokane Valley WA 99215-5108
15000 E Euclid, Spokane Valley WA 99216
Phone: (800) 367-2586

ALLOY LIMITS

	SI	FE	CU	MN	MG	CR	ZN	TI	V	ZR	OTHER	MAX
2024												
MIN(wt%)	0.00	0.00	3.8	0.30	1.2	0.00	0.00	0.00	0.00	0.00	EACH	0.05
MAX(wt%)	0.50	0.50	4.9	0.9	1.8	0.10	0.25	0.15	0.05	0.05	TOT	0.15

Aluminum Remainder

ORDER_COMMENTS

AMC A92024-155 R 6

CERTIFICATION

Kaiser Aluminum, Trentwood Works, is ISO 9001, AS9100, and ISO 14001 certified, and hereby certifies that all material shipped under this order:

- * has been inspected, tested, and found to be in conformance with the requirements of the specifications indicated herein.
- * All test equipment and measuring devices are calibrated and certified in accordance applicable specifications. For material thicknesses outside specification limits, mechanical properties are as shown herein and chemical composition meets specification requirements. Reported elongation values have been measured as elongation at fracture.
- * was melted in the United States of America or a qualifying country per DFARS 225.872-1(a), was manufactured in the United States of America, and meets the requirements of DFARS 252.225 for domestic content.
- * has been thermally processed in compliance with AMS 2772, where applicable.
- * is mercury free, within the limits of detection of ASTM E1215 (<1ppm).
- * is in compliance with RoHS 2, European Union Directive 2011/65/EU.
- * is in compliance with European Chemical Agency, ECHA, REACH regulations, (EC) No 1907/2006, and Kaiser regularly monitors these regulations for updates.
- * is free of Conflict Minerals, as defined in Section 15.2 of the Dodd-Frank Act.
- * is free of weld repair.
- * meets the reporting requirements of EN10204, Type 3.1.

Any warranty is limited to that shown on Kaiser Aluminum's standard general terms and conditions of sale. Test reports are on file, subject to examination. Test reports shall not be reproduced except in full, without the written approval of the Kaiser Aluminum laboratory. The recording of false, fictitious or fraudulent statements or entries on the certificate may be punished as a felony under federal law.

JAMES HEMENWAY, TECHNICAL PROCESS MANAGER

SPECIFICATION CONTROL DRAWING

PURCHASE MATERIAL (2024-T3 ALUMINUM SHEET)

SPECIFICATION:

QQ-A-250/4 OR AMS-QQ-A-250/4
OR AMS 4037
OR ASTM B209

PART NUMBER:

M2024T3S .XXX THK

WHERE ".XXX" = SHEET THICKNESS (IN INCHES)

EG. 0.063" THICK SHEET = M2024T3S.063

PREFERRED SIZE:

.XXX BY 4FT BY 10FT

RELEASED
R 2009-03-23
JNP

B	REFORMAT DWG. ADD ASTM B209 SPEC (ZN D8-1), PAR 09-020A	CP	09 07 07
A	NEW ISSUE	DS	01 09 24
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	09 07 07		
DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA		REV. B	
DRAWING NO M2024T3S		SHEET 1 OF 1	
TITLE 2024-T3 SHEET SPEC		SCALE NTS	
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MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M2024735.080

PO / BATCH NO.: P040612/S101799

DATE: 18/08/13

MATERIAL CERT REC'D: Yes

THICKNESS ORDERED: 0.080"

QUANTITY RECEIVED: 96sf

THICKNESS RECEIVED: 0.080"

QUANTITY INSPECTED: 96sf

SHEET SIZE ORDERED: 4'x12'

QUANTITY REJECTED: 0

SHEET SIZE RECEIVED: 4'x12'

DESCRIPTION	NCR (Check Y/N)		COMMENTS
SURFACE DAMAGE	Y	<input checked="" type="checkbox"/>	
CORRECT FINISH	<input checked="" type="checkbox"/>	N	
CORROSION	Y	<input checked="" type="checkbox"/>	
CORRECT GRAIN DIRECTION	<input checked="" type="checkbox"/>	N	
CORRECT MATERIAL PER M-DRAWING	<input checked="" type="checkbox"/>	N	AMS-QQ-A-250/4
CORRECT THICKNESS	<input checked="" type="checkbox"/>	N	
PHOTO REQUIRED	Y	<input checked="" type="checkbox"/>	
CORRECT REF # TO LINK CERT	<input checked="" type="checkbox"/>	N	MT-241461B3
CORRECT MATERIAL IDENTIFICATION	<input checked="" type="checkbox"/>	N	
CORRECT M# ON THE MATERIAL	<input checked="" type="checkbox"/>	N	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y	N	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y	N	

CUT SAMPLE PIECE OF MATERIAL AND PREFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

testers located in the Quality Office

QC 18 INSPECTION	ENGINEERING SIGNOFF (if required)
INSPECTED BY: <u>AY</u>	SIGNED OFF BY: _____
DATE: <u>18/08/13</u>	DATE: _____

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in